

Application No.: 10/581,245
Reply dated December 27, 2010
Reply to Office Action of July 27, 2010

Docket No.: 4266-0122PUS1
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AMENDMENTS TO THE DRAWINGS

Please substitute the attached Replacement Sheet, containing amended Fig. 1, for the corresponding original drawing sheet containing Fig. 1.

REMARKS

With the entry of this Amendment, claims 1, 3-5 and 7-16 will be pending in this patent application. In this paper, claims 2 and 6 have been canceled, and claims 1, 3, 4, 9-11 and 13-16 have been amended. Support for the amendments to claim 1 can be found in drawing Fig. 1 and in the specification on page 7, line 37, page 8, lines 23-25, and page 11, line 39, through page 12, line 1. Support for the amendments to claims 10, 14 and 15 can be found in drawing Fig. 1.

OBJECTION TO DRAWINGS

Applicants are submitting herewith, as an attachment to this paper, a Replacement Sheet containing amended Fig. 1. In amended Fig. 1, reference characters 5 and 6 and their lead lines have been relocated so as to correctly identify the rinsing zones that are referenced in the specification on page 11, line 25. Exit nozzles 17, 18 disposed above and below the upper run of conveying belt 21, are clearly shown in the rinsing zones 5, 6. No new matter has been introduced by the amendments to Fig. 1 of the drawings.

In view of the amendments to the drawings made herein, Applicants request that the objections to the drawings be withdrawn.

OBJECTION TO SPECIFICATION

The Examiner objected to the specification as not providing support for subject matter recited in claim 1 as presented in the Amendment filed in this application on July 6, 2010.

As amended herein, claim 1 does not recite the subject matter cited by the Examiner as the basis for the objection. Applicants therefore request that the objection to the specification be withdrawn.

SECTION 112, 1ST PARAGRAPH, REJECTION

Claims 1-16 were rejected under 35 USC § 112, first paragraph, as failing to comply with the enablement requirement. Applicants traverse this rejection insofar as it might be deemed applicable to claims 1, 3-5 and 7-16 as now presented.

As amended herein, claim 1 and claims 3-5 and 7-16 do not recite the subject matter cited by the Examiner as the basis for this rejection. Applicants therefore request that this rejection be withdrawn.

SECTION 112, 2ND PARAGRAPH, REJECTION

Claims 13 and 16 were rejected under 35 USC § 112, second paragraph, as being indefinite. Applicants traverse this rejection insofar as it might be deemed applicable to claims 13 and 16 as now presented.

Claim 13 has been amended to depend from claim 3, which clearly introduces the exit nozzles. Also, claim 13 has been amended to specify that the exit nozzles can be pivotally adjusted.

Claim 16 depends from claim 15, which has been amended to clearly introduce a variable-capacity drive for the motor-driven fan.

In view of the amendments to the claims and in view of the foregoing observations, Applicants submit that claims 13 and 16 comply fully with the requirements of 35 USC § 112, second paragraph. Applicants therefore request that this rejection be withdrawn.

PRIOR ART REJECTION I

Claims 1 and 7-11 were rejected under 35 USC § 102(b) as being anticipated by DE 30 19 922 A1 (Pilz). Applicants traverse this rejection insofar as it might be deemed applicable to claims 1 and 7-11 as now presented.

Claim 1 has been amended to call for air intake openings that can accommodate external-air streams drawn into the dishwasher at an inlet and an outlet of the dishwasher. Claim 1 has also been amended to specify that "the suction-extraction location is disposed upstream, relative to the transporting direction, of the at least one washing zone, the at least one rinsing zone and the drying zone." That is, claim 1 as now presented recites a dishwasher in which a heated air stream moves through washing, rinsing and drying zones of the dishwasher in a direction counter to the transporting direction of wash ware through the dishwasher.

In Applicant's disclosed and claimed dishwasher, the flow of the exhaust-air stream in a direction counter to the transporting direction of the wash ware in the dishwasher yields several advantages. The direction of flow is from warmer regions toward cooler regions, whereby the energy content of the moist air stream is applied advantageously to advancing wash ware and is dissipated. As a result, less cooling is required before the air is exhausted from the interior to the exterior of the dishwasher. The flow occurs from cleaner to less clean regions inside the dishwasher, so that wash ware that has been cleaned is not subjected to contamination from the

exhaust-air stream. Also, the direction of the flow pulls hot moist air away from the inlet and outlet of the dishwasher, preventing the unwanted discharge of hot moist air from these locations.

In the dishwasher shown in Fig. 4 of Pilz, exhaust fan 14 is located upstream of pre-wash and wash zones 2, 3, in the transporting direction dishes 13 through the dishwasher. The air drawn through exhaust fan 14 is supplied only through an opening located at the outlet of the dishwasher. There is no disclosure whatsoever in Pilz of an air stream passing through a wash zone in a direction counter to the transporting direction of the dishes. Obviously, the dishwasher disclosed by Pilz cannot realize the advantages of Applicant's disclosed and claimed dishwasher and cannot satisfy the requirements of Applicant's amended independent claim 1 and dependent claims 7-11.

In view of the foregoing observations, Applicants submit that the disclosure in Pilz cannot properly serve as a basis for rejecting claims 1 and 7-11, as now presented, under 35 USC § 102(b). Applicants therefore request that this rejection be withdrawn.

PRIOR ART REJECTION II

Claim 2 was rejected under 35 USC § 103(a) as being unpatentable over Pilz in view of US 3598131 (Weihe). Applicants traverse this rejection insofar as it might be deemed applicable to claim 1 as now presented.

Claim 2 has been canceled. As noted above under the heading PRIOR ART REJECTION I, claim 1 now recites the suction-extraction location as being disposed upstream, relative to the transporting direction, of the at least one washing zone, the at least one rinsing zone and the drying zone.

On page 2 of the Office Action, The Examiner acknowledges that "PILZ does not appear to explicitly/expressly disclose the suction extraction location being in the region of the dishwasher inlet." The Examiner cites Weihe for its disclosure of "a steam collection system for dishwashing machines that includes a suction-extraction device (**element 65 of figure 1**) in the region of the dishwasher inlet (**as shown in figure 1**)."¹ The Examiner contends, "At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ to include the suction-extraction device location of

WEIHE, since locating a suction-extraction device near the inlet would serve to reduce the humidity in the room, as taught by WEIHE (**abstract**).

Pilz explicitly teaches locating exhaust fan 14 immediately downstream of the fan 11 employed in the region of the dishwasher where dishes are dried, and upstream of the pre-wash and washing zones 2, 3. There is no suggestion whatsoever in Pilz of locating fan 14 near the inlet as proposed by the Examiner, and the modification of the Pilz dishwasher proposed by the examiner would entail a gross alteration of the fundamental architecture of the Pilz dishwasher. The resulting dishwasher would not be recognizable as one constructed according to teachings in Pilz and would not operate as taught by Pilz. Applicants therefore submit that the modification of the Pilz dishwasher proposed by the Examiner cannot be reasonably viewed as one that would have been obvious.

In view of the foregoing observations, Applicants submit that no reasonable combination of the disclosures in Pilz and Weihe can properly serve as a basis for rejecting claim 1, as now presented, under 35 USC § 103(a). Applicants therefore request that this rejection be withdrawn.

PRIOR ART REJECTION III

Claims 3-6, 12 and 13 were rejected under 35 USC § 103(a) as being unpatentable over Pilz in view of Weihe and further in view of US 2005/0072019 A1 (Rago et al.). Applicants traverse this rejection insofar as it might be deemed applicable to claims 3-5, 12 and 13 as now presented.

On page 9 of the Office Action, the Examiner acknowledges that "PILZ does not appear to explicitly/expressly disclose the fan having pivotably designed nozzles." The Examiner cites Rago et al. for its disclosure of "a drying fan than has pivoting exit nozzles (**abstract, pivoting action best shown in figure 4**)." The Examiner contends, "At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ and WEIHE to include the drying fan with pivoting nozzles of RAGO ET AL., since one of skill in the art at the time of the invention would have known that the sweeping action created by pivoting nozzles would serve to enhance the drying speed and effectiveness."

The Examiner does not mention that the pivoting nozzles of Rago et al. are employed in a hand-held hair dryer. Applicants submit that the teachings in Rago et al. are so far afield of the conveyor dishwashers disclosed by Pilz and Weihe that Rago et al. cannot be reasonably viewed

as relevant to the technology employed in the Pilz and Weihe dishwashers and that the teachings in Rago et al. cannot be reasonably viewed as having applicability to the Pilz and Weihe dishwashers that would have been obvious. Also, there are no teachings in Rago et al. that could remedy deficiencies in the proposed Pilz-Weihe dishwasher vis-à-vis the requirements of amended independent claim 1, as pointed out above under the heading PRIOR ART REJECTION II.

In view of the foregoing observations, Applicants submit that no reasonable combination of the disclosures in Pilz, Weihe and Rago et al. can properly serve as a basis for rejecting claims 3-5, 12 and 13, as now presented, under 35 USC § 103(a). Applicants therefore request that this rejection be withdrawn.

PRIOR ART REJECTION IV

Claim 14 was rejected under 35 USC § 103(a) as being unpatentable over Pilz in view of SE 9503485 (Andersson). Applicants traverse this rejection insofar as it might be deemed applicable to claim 14 as now presented.

The Examiner cites Andersson for its disclosure of "a ventilation control system which utilizes a speed regulated fan (**abstract**)."¹ Without acquiescing in the Examiner's proposal to modify the Pilz dishwasher to incorporate teachings from Andersson, Applicants observe that the disclosure in Andersson cannot remedy deficiencies in the Pilz disclosure vis-à-vis the requirements of amended parent claim 1, as pointed out in the discussion above under the heading PRIOR ART REJECTION I. Accordingly, no dishwasher resulting from a combination of disclosures in Pilz and Andersson could meet the requirements of claim 14.

In view of the foregoing observations, Applicants submit that no reasonable combination of the disclosures in Pilz and Andersson can properly serve as a basis for rejecting claim 14, as now presented, under 35 USC § 103(a). Applicants therefore request that this rejection be withdrawn.

PRIOR ART REJECTION V

Claims 15 and 16 were rejected under 35 USC § 103(a) as being unpatentable over Pilz in view of Weihe and Rago et al. and further in view of US 3896827 (Robinson). Applicants traverse this rejection insofar as it might be deemed applicable to claims 15 and 16 as now presented.

The Examiner cites Robinson for its disclosure of "a dishwashing machine that senses the presence of dishes, water temperature, water pressure, and detergent concentration to control the washing process (**abstract, lines 1-35 of column 2**)." Without acquiescing in the Examiner's proposal to modify the proposed Pilz-Weihe-Rago et al. dishwasher to incorporate teachings from Robinson, Applicants observe that the disclosure in Robinson cannot remedy deficiencies in the Pilz, Weihe and Rago et al. disclosures vis-à-vis the requirements of amended parent claims 1 and 3, as pointed out in the discussions above under the headings PRIOR ART REJECTION I and PRIOR ART REJECTION III. Accordingly, no dishwasher resulting from a combination of disclosures in Pilz, Weihe, Rago et al. and Robinson could meet the requirements of claims 15 and 16.

In view of the foregoing observations, Applicants submit that no reasonable combination of the disclosures in Pilz, Weihe, Rago et al. and Robinson can properly serve as a basis for rejecting claims 15 and 16, as now presented, under 35 USC § 103(a). Applicants therefore request that this rejection be withdrawn.

OTHER PRIOR ART

Applicants have considered the other prior art cited by the Examiner. Applicants are not commenting on this prior art, because it was not applied against the claims in this application.

CONCLUSION

In view of the amendments, observations and arguments presented herein, Applicants respectfully request that the Examiner reconsider and withdraw the objections and rejections stated in the outstanding Office Action and recognize all of the pending claims as allowable.

If unresolved matters remain in this application, the Examiner is invited to contact Frederick R. Handren, Reg. No. 32,874, at the telephone number provided below, so that these matters can be addressed and resolved expeditiously.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: December 27, 2010

Respectfully submitted,

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Attachment: Replacement Sheet (Fig. 1)